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Subject Fw: Bison Plan

Attached is a Sullys Hill based logistics plan to carry out germplasm conservation of bison in Region 6 and the FWS. It starts out with an effort to move all Sullys Hill bison to Ft. Niobrara NWR and to replace "pure" bison back into Sullys Hill. These actions will be done concurrently. This planning direction has been endorsed by ARD Coleman and R.O. Vet Roffe. There is currently no funding available at Sullys Hill or Ft. Niobrara to carry out this plan so assistance will have to come from the Regional Office to carry out these transfers. In talking with Project Leader Royce Huber his office will also come up with a similar planning effort. We would appreciate any insights or assistance in moving this effort forward. Thanks, Roger



Bison Germplasm Conservation SH Plan.doc

2006 Bison Germplasm Conservation Plan

The staff of Sullys Hill National Game Preserve (SHNGP) intends to implement all of the goals and objectives developed in 2005 for Fish and Wildlife Service bison management. Specifically though, the first two listed goals are of highest priority to address. The first goal pertains to the legal mandates which legislated certain refuges to protect and perpetuate bison as a trust species. SHNGP must continue to carry out its designated purpose, mission, and objectives by maintaining a bison herd per this legislation. The second goal focuses on the conservation and restoration of a native species. Currently, cattle hybridization is identified in all Fish and Wildlife Service herds except for SHNGP. Therefore, as part of a Service-wide bison germplasm initiative, SHNGP bison are planned for growth into a minimum viable population size for use as the Service's founder herd. To mitigate the removal of these animals from the refuge, and meet the requirements of the legal mandates, bison from other 'pure' herds will be introduced into SHNGP. To efficiently achieve these goals, adequate communications and planning are necessary. Essential details of the transfer and introduction of bison are documented in this plan.

A. The Transfer

SHNGP bison are planned for transfer to Fort Niobrara National Wildlife Refuge, Valentine, NE, a site which will provide adequate facilities to grow the herd to a minimum viable population. Several details and logistics are listed that must be addressed prior to transfer (these are from the perspective of SHNGP staff and do not represent input from Fort Niobrara staff):

- 1. A Regional Bison Team will develop a comprehensive regional bison management plan, including this immediate transfer involving the SHNGP herd
- 2. Suggested dates of transfer: November 1, 2006 (this would hopefully reduce chances of young being injured in process and make baiting easier)
- 3. Regional Office (RO)/Tom Roffe will provide details by July 1, 2006 of what is needed for handling facilities to round-up bison at Sullys Hill
- 4. RO will provide funding to rent or purchase handling facilities by September 1, 2006
- 5. RO will provide funding for feed needed for baiting
- 6. RO/Tom Roffe will provide a plan on how round-up will function, including details such as marking animals, how animals should be separated in the corrals, how we will deal with animals that will not come into the corrals, etc.
- 7. RO/Tom Roffe will quarantine and test bison for disease prior to transfer, and adequately address any disease issues (minimal herd health data is available on the herd)
- 8. RO will provide funding for a biological science technician for 4 pay periods to assist with the preparations for the transfer (this is necessary because the current Sullys Hill Manager position is vacant)
- 9. RO will provide vehicle and staff to actually transfer the bison

- 10. Once this herd reaches a minimum viable population size, Sullys Hill staff will be given the opportunity to re-introduce some of these animals back into SHNGP
- 11. Devils Lake Staff, in coordination with the RO will formulate a national press release explaining bison germplasm conservation plan and the role of the SHNGP herd (Press release must state that once the founder herd is propagated, it is likely that some of these bison will be brought back to Sullys Hill).

B. The Introduction

Although difficult to ensure an absolute 'pure' bison with current technology, a major goal of SHNGP staff is to introduce bison that are as 'pure' as possible in order to actively participate in bison germplasm conservation. Based on Dr. Jim Derr's model, a 95% power of detection can be achieved to ensure that there is not cattle hybridization in a herd. Therefore, bison planned for introduction into Sullys Hill will be transported from herds that possess no cattle hybridization based on this 95% level. Additionally, bison introduced into SHNGP will represent a high level of unique alleles and diversity specific to bison. A small number of bison will be introduced from multiple herds to reduce the likelihood of inbreeding depression. Additionally, new animals will be introduced periodically to also prevent inbreeding. Once again, several considerations and logistical details must be addressed prior to introduction.

- 1. RO staff will work with other federal, private, or Canadian herds to obtain 8 'pure'bison (i.e. 4 cows from Wind Cave NP, 3 cows from Wood Buffalo NP, 1 young bull from Wood Buffalo NP, and 1 bull from a private herd)
- 2. RO will ensure that all bison brought to SHNGP will be sufficiently vet checked, and adequately quarantined to ensure a disease free herd
- 3. RO will coordinate transportation and delivery associated with introduction
- 4. RO will provide funding for all costs associated with introduction of replacement herd into SHNGP
- 5. RO will provide funding for the purchase of facilities to regularly collect herd data (i.e. squeeze shoot)
- 6. Bison will be delivered to SHNGP by November 10, 2006 (it may work well to coincide the transfer with the introduction for efficiency in transportation)
- 7. RO will ensure that periodically bison from genetically 'pure' herds can be brought in to avoid inbreeding depression.